Robust Framework for Interfacing Devices (RFID)

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4 May, 2018

Description

A battery powered device that receives and stores radio-frequency identification (RFID) tag IDs will be designed, built, and tested in this project. The device will receive tag IDs via serial communication. The device will store tag IDs, with date and time stamps, on an SD card formatted with a FAT file system. The device will be powered by a battery and its voltage regulated with a DC to DC converter.

Inputs

- Received RFID tag ID

Outputs

- Tag IDs on FAT filesystem with date and timestamp for received tag IDs

Specifications

- DC-DC converter supplies 3.3V DC ±10% with a maximum ripple of 200mVpp and capable of at least 200mA
- Uses a custom printed circuit board (PCB)
- Capable of creating and writing files on a FAT formatted SD card for data storage
- Received RFID tag ID, date, and time written to file
- File handling done without using an existing FAT file system library

Signature	Date
Signature	Date